

L Number	Hits	Search Text	DB	Time stamp
1	22049	golf near5 ball\$1	USPAT; EPO; JPO; DERWENT	2003/12/04 14:08
2	4	(golf near5 ball\$1) same (expand\$3 same expansion same swell\$3 swollen)	USPAT; EPO; JPO; DERWENT	2003/12/04 09:00
3	1	("5879244").PN.	USPAT	2003/12/04 10:37
4	41	473/368.ccls.	USPAT; EPO; JPO; DERWENT	2003/12/04 10:46
5	99	473/370.ccls.	USPAT; EPO; JPO; DERWENT	2003/12/04 10:46
6	85	473/370.ccls. not 473/368.ccls.	USPAT; EPO; JPO; DERWENT	2003/12/04 10:47
7	6	(473/370.ccls. not 473/368.ccls.) and (expand\$3 expansion swell\$3 swollen)	USPAT; EPO; JPO; DERWENT	2003/12/04 11:14
8	1315	(golf near5 ball\$1) and (expand\$3 expansion swell\$3 swollen)	USPAT; EPO; JPO; DERWENT	2003/12/04 11:19
9	449	((golf near5 ball\$1) and (expand\$3 expansion swell\$3 swollen)) and heat\$3	USPAT; EPO; JPO; DERWENT	2003/12/04 11:16
10	0	((((golf near5 ball\$1) and (expand\$3 expansion swell\$3 swollen)) and heat\$3) and 473/7\$.ccls.	USPAT; EPO; JPO; DERWENT	2003/12/04 11:16
11	198	((((golf near5 ball\$1) and (expand\$3 expansion swell\$3 swollen)) and heat\$3) and 473/7\$.ccls.	USPAT; EPO; JPO; DERWENT	2003/12/04 11:16
12	274	(golf near5 ball\$1) and ((expand\$3 expansion swell\$3 swollen) same (core center layer\$1))	USPAT; EPO; JPO; DERWENT	2003/12/04 11:23
13	66	(golf near5 ball\$1) and ((expand\$3 expansion swell\$3 swollen) same (core center layer\$1) same heat\$3)	USPAT; EPO; JPO; DERWENT	2003/12/04 11:23
14	102	5184828.URPN.	USPAT	2003/12/04 11:41
15	153	(golf near5 ball\$1) same (cover) same crack\$3	USPAT; EPO; JPO; DERWENT	2003/12/04 11:53
16	115	(golf near5 ball\$1) same (cover near10 crack\$3)	USPAT; EPO; JPO; DERWENT	2003/12/04 11:53
17	92	(golf near5 ball\$1) same (thermosetting near5 polyurethane) same cover	USPAT; EPO; JPO; DERWENT	2003/12/04 14:41
18	172	(golf near5 ball\$1) same ((thermoset thermosetting) near5 polyurethane) same cover	USPAT; EPO; JPO; DERWENT	2003/12/04 14:41
19	166	(golf near5 ball\$1) same ((thermoset thermosetting) adj55 polyurethane) same cover	USPAT; EPO; JPO; DERWENT	2003/12/04 14:41
20	158	(golf near5 ball\$1) same ((thermoset thermosetting) adj5 polyurethane) same cover	USPAT; EPO; JPO; DERWENT	2003/12/04 14:42
21	67	((golf near5 ball\$1) same ((thermoset thermosetting) adj5 polyurethane) same cover) not ((golf near5 ball\$1) same (thermosetting near5 polyurethane) same cover)	USPAT; EPO; JPO; DERWENT	2003/12/04 14:42

L Number	Hits	Search Text	DB	Time stamp
1	22049	golf near5 ball\$1	USPAT; EPO; JPO; DERWENT	2003/12/04 08:54
2	4	(golf near5 ball\$1) same (expand\$3 same expansion same swell\$3 swollen)	USPAT; EPO; JPO; DERWENT	2003/12/04 09:00
3	1	("5879244").PN.	USPAT	2003/12/04 10:37
4	41	473/368.ccls.	USPAT; EPO; JPO; DERWENT	2003/12/04 10:46
5	99	473/370.ccls.	USPAT; EPO; JPO; DERWENT	2003/12/04 10:46
6	85	473/370.ccls. not 473/368.ccls.	USPAT; EPO; JPO; DERWENT	2003/12/04 10:47
7	6	(473/370.ccls. not 473/368.ccls.) and (expand\$3 expansion swell\$3 swollen)	USPAT; EPO; JPO; DERWENT	2003/12/04 11:14
8	1315	(golf near5 ball\$1) and (expand\$3 expansion swell\$3 swollen)	USPAT; EPO; JPO; DERWENT	2003/12/04 11:19
9	449	((golf near5 ball\$1) and (expand\$3 expansion swell\$3 swollen)) and heat\$3	USPAT; EPO; JPO; DERWENT	2003/12/04 11:16
10	0	((((golf near5 ball\$1) and (expand\$3 expansion swell\$3 swollen)) and heat\$3) and 473/7\$.ccls.	USPAT; EPO; JPO; DERWENT	2003/12/04 11:16
11	198	((((golf near5 ball\$1) and (expand\$3 expansion swell\$3 swollen)) and heat\$3) and 473/7\$.ccls.	USPAT; EPO; JPO; DERWENT	2003/12/04 11:16
12	274	(golf near5 ball\$1) and ((expand\$3 expansion swell\$3 swollen) same (core center layer\$1))	USPAT; EPO; JPO; DERWENT	2003/12/04 11:23
13	66	(golf near5 ball\$1) and ((expand\$3 expansion swell\$3 swollen) same (core center layer\$1) same heat\$3)	USPAT; EPO; JPO; DERWENT	2003/12/04 11:23
14	102	5184828.URPN.	USPAT	2003/12/04 11:41

US-PAT-NO: 6380310

DOCUMENT-IDENTIFIER: US 6380310 B2
See image for Certificate of Correction

TITLE: Nylon compositions for golf ball
covers and method of
making same

----- KWIC -----

Abstract Text - ABTX (1):

Disclosed herein is a golf ball with a cover formed from a polyamide composition and a method of making the same. More specifically, the golf ball has a cover which contains a combination of a polyamide component and an ionomeric component or a non-ionomeric terpolymer component. The cover composition has excellent durability and resistance to cracking, even at cold temperatures. The nylon-ionomer blend is a useful substitute for an ionomer golf ball cover, particularly when a low spin golf ball is desired.

Brief Summary Text - BSTX (11):

Yet another object of the invention is to provide a golf ball having a hard cover layer which is resistant to cracking.

Detailed Description Text - DETX (65):

Durability is determined by firing a golf ball at 135 ft/sec (at 72.degree. F.) into 5-sided steel pentagonal container, the walls of which are steel plates. The container 10, which is shown schematically in FIG. 1, has a 191/2 inch long insert plate 12 mounted therein, the central portion 14 of which has horizontally extending square grooves on it which are

intended to simulate a square grooved face of a golf club. The grooves, which are shown in an exaggerated form in FIG. 2, have a width 30 of 0.033 inches, a depth 32 of 0.100 inches, and are spaced apart from one another by land areas 34 having a width of 0.130 inches. The five walls 16 of the pentagonal container each have a length of $14\frac{1}{2}$ inches. The inlet wall is vertical and the insert plate is mounted such that it inclines upward 60.degree. relative to a horizontal plane away from opening 20 in container 10. The ball travels $15\frac{1}{2}$ - $15\frac{3}{4}$ inches horizontally from its point of entry into the container 10 until it hits the square-grooved central portion 14 of insert plate 12. The angle between the line of trajectory of the ball and the insert plate 12 is 30.degree.. The balls are subjected to 70 or more blows (firings) and are inspected at regular intervals for breakage (i.e., any signs of cover cracking or delamination). If a microcrack forms in a ball, its speed will change and the operator is alerted. The operator then visually inspects the ball. If the microcrack cannot yet be observed, the ball is returned to the test until a crack can be visually detected.